

What is claimed is:

1. A frame joint structure comprising:

5 a first frame member of U-shaped cross section having a first sidewall, a second sidewall, a bottom wall and an opening;

a second frame member, similar to the first frame member, of U-shaped cross section having an opening, said second frame member having an end portion connected to at least one of the first sidewall and the second sidewall of the first frame member;

10 a reinforcing member extending into the first frame member and the second frame member by predetermined lengths at a joint of the first frame member and the second frame member;

a plate member closing the openings of the first and second frame members to form closed cross sections; and

15 a foamed resin filling spaces defined by the plate member, the first and second frame members and the reinforcing member.

2. A joint structure according to claim 1, wherein the reinforcing member has a T shape as viewed in top plan.

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3. A joint structure according to claim 1, wherein the reinforcing member has an L shape as viewed in top plan.

4. A joint structure according to claim 1, wherein the plate member and the first and second frame members are made from a metal material different from
25 a metal material from which the reinforcing member is made.

5. A joining method of a frame joint structure, comprising the steps of:

temporarily securing by welding an end portion of a second frame member of a U-shaped cross section having an opening to a first frame member of a U-shaped cross section having an opening;

5 mounting a foam resin to a reinforcing member to be extended by predetermined lengths into the first frame member and the second frame member at a temporarily welded joint;

setting the reinforcing member mounted with the foam resin within the first frame member and within the second frame member;

10 closing the openings of the first and second frame members by a plate member so that the frame members have closed cross sections; and

heating and foaming the foam resin within the first and second frame members.

15 6. A joining method according to claim 5, further comprising the step of applying a coat of paint to a surface of the plate member after the closed cross-section forming step, wherein the heat foaming step comprises heat drying of the applied paint.